a bottom adapted for attachment to the skin of the user;

a fluidic path portion having a reservoir, a pumping chamber and an outlet;

at least one flexible membrane portion forming at least one portion of the fluidic path portion and the reservoir;

a tubing attached to the outlet, the tubing adapted to connect to a cannula, wherein the reservoir having an interior for containing a fluidic medium, the reservoir having an outlet port and being operatively coupled to a pumping assembly to selectively drive fluid out the outlet port from the reservoir interior; and

a needle insertion device comprising an introduction needle for inserting the cannula into the user's skin, wherein the disposable housing assembly has a passage through which the introduction needle extends.

13. The delivery device system of claim **12**, further comprising a reusable housing assembly adapted to be secured to the disposable housing assembly, the reusable housing assembly comprising a volume sensing device, wherein the volume sensing device determines the volume of fluid delivered to the user.

14. The delivery device system of claim **12**, wherein the reservoir further comprises a septum, whereby the septum for filling the reservoir with therapeutic fluid.

15. The delivery device system of claim **12**, wherein the tubing further comprises an outlet end and a cannula interface end, the outlet end attached to the outlet and the cannula interface end configured to attach to a cannula.

16. A delivery device system for delivering an infusion medium to a user, the device comprising:

a disposable housing assembly adapted to be secured to a user's skin comprising:

a reservoir having an interior for containing a fluidic medium, the reservoir having an outlet port and being operatively coupled to a pumping assembly to selectively drive fluid out the outlet port from the reservoir interior;

a substrate having flexible membrane material thereon, and incorporating therein the reservoir and a fluid channel, the reservoir having a septum, the fluid channel being part of a fluid path in the disposable housing assembly from the outlet port to a cannula port and comprising a series of regions exposed to the flexible membrane material, at least one of the regions being a valve region; and

a tubing portion connected to the cannula port of the disposable housing assembly; and

a needle insertion device for inserting a cannula into the user's skin, the needle insertion device comprising an introduction needle, wherein the disposable housing assembly has a passage through which the introduction needle extends.

17. The delivery device system of claim **16**, further comprising a reusable housing assembly adapted to be secured to the disposable housing assembly, the reusable housing assembly comprising a volume sensing device, wherein the volume sensing device determines the volume of fluid delivered to the user.

18. The delivery device system of claim **16**, wherein the tubing portion comprises a cannula port end and a cannula interface end, the cannula port end attached to the cannula port and the cannula interface end configured to attach to a cannula.

19. The delivery device system of claim **16**, wherein the fluid path further comprises a pump chamber region.

20. The delivery device system of claim **16**, wherein the tubing adapted to connect to a cannula.

21. The delivery device system of claim **16**, wherein the substrate and the flexible membrane material constitute a fluidic assembly, and wherein the disposable housing assembly further comprising a disposable base into which the fluidic assembly fits.

22. The delivery device system of claim **21**, the disposable housing assembly further comprising a pad coupled to a bottom of the disposable housing assembly for attaching the housing structure to the user.

23. The delivery device system of claim **17**, the disposable housing assembly comprising a latching mechanism for permitting selective engagement and disengagement of the reusable housing assembly with the disposable assembly.

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